

REMARKS

Claims 1 – 25 are currently pending in this application.

Response to Drawing Objections

Replacement drawings are hereby submitted to correct the objections to the drawings. New drawings have also been added to illustrate the tool heads 70, the rails 24 and the mounting of system 10 on the rails 24 in a vehicle.

Response to Claim Rejections – 35 USC 112, first paragraph

Claims 1 - 17 have been amended to clarify the claimed limitations. A careful reading of the specification will enable one skilled in the art to make and/or use the invention. It is noted that for this particular art, that is the design of automotive repair equipment, the level of skill in the art would be the equivalent of a mechanical engineer or one having at least a bachelor of science in mechanical engineering or its equivalent as it relates to equipment design. An element by element reference is provided below for the benefit of the examiner.

1. A system (10) (paragraph 18) for repairing dents in automotive bumpers, comprised of:
 - a support frame (52, 54) (paragraphs 20, 21);
 - a mounting table (42) (paragraphs 18, 19, 28) having a resilient mounting surface (plastic or rubber, paragraph 28) affixed to said support frame for supporting a bumper;
 - an adjustable positioning mechanism (holes 44, and pins; leveling blocks 86) (paragraph 28; paragraph 26) for positioning a bumper in the appropriate position on said mounting table;
 - a top rail (50) (paragraphs 20, 21) mounted on said support frame;
 - a press (60) (paragraphs 21, 22) suspended from said support frame on said top rail;
 - a tool head (70) (paragraphs 24, 25) attachable to said press for holding at least one tool for pressing dents out of a bumper; whereby a bumper may be positioned on said mounting table below said press so said tool head presses a deformation smooth on a bumper.

2. The system of claim 1 wherein said system includes:
a hydraulic power supply unit (paragraph 22) to operate said press.
3. The system of claim 1 wherein said system includes:
a pneumatic supply unit (third sentence, paragraph 22) to operate said press.
4. The system of claim 1 wherein said system includes:
a pivotable mechanism (paragraph 20) for supporting said top rail for pivoting movement relative to said support frame.
5. The system of claim 1 wherein said adjustable positioning mechanism includes:
a plurality of holes (44) (paragraph 28) formed in said mounting table; and
at least one pin insertable in said holes for controlling the position of a bumper..
6. The system of claim 1 wherein said system further includes:
a mounting mechanism (paragraph 21) mounting said top rail to said support frame for allowing said press to move relative to said support frame.
7. The system of claim 1 wherein said system further includes:
a mounting mechanism (paragraph 21) for mounting said press on said top rail and allowing said press to adjustably move relative to said top rail.
8. The system of claim 1 wherein said system includes:
a mounting mechanism (third sentence, paragraph 18) for mounting said system in the bed of a truck.
9. The system of claim 1 wherein said support frame includes
a bottom rail (30) (paragraph 18) upon which said mounting table may be removably positioned thereon.

10. The system of claim 9 wherein said bottom rail further comprises at least one leveling element (82, 84) (paragraphs 26) substantially perpendicular to said bottom rail to stabilize the system.

11. The system of claim 1 wherein said system includes:
a plurality of said tool heads (70); and
each of said tool heads having a differing configuration to press deformations in a bumper depending on the size, location and style of bumper.

12. A method for repairing deformations to bumpers using a press system (10) having a mounting table (42) below a top rail (50) on a support frame (52, 54) with a press (60) suspended from said top rail, said method comprising the steps of:

placing a deformed bumper on a said mounting table;
positioning said mounting table below said support frame;
positioning said press directly above a dent located on the deformed bumper;
attaching a tool head (70) suitable for pressing out a dent in a metallic surface to the distal end of said press;
actuating said press and thereby applying force against the dented area of the deformed bumper, and;
repeating said actuation until the deformed bumper is restored to its original shape.

13. The method of claim 12 wherein said suspending a hydraulic press includes:
providing said support frame with a continuous channel (56) and a top portion (58);
providing a plate (62) on a top portion of said press;
placing said press within said continuous channel on said support frame; and
affixing the edges of said plate on said press against the top portion of said support frame.

14. The method of claim 12 further comprising repeating said actuating said press on the opposite side as the one selected in placing a deformed bumper on a mounting table.

15. The method of claim 12 wherein attaching a tool may be selected from a plurality of available tools attachable to a tool head on the distal end of said press.

16. The method of claim 12 wherein said press is pivotally mounted (paragraph 20) to said support frame.

17. The method of claim 12 wherein said method further includes:
placing leveling blocks (82, 84) relative to the bumper to place the bumper in the proper position relative to said tool head.

18. The system of claim 1 wherein said adjustable position mechanism includes:
at least one leveling element (82, 84) to support a bumper in a correct position.

19. A system for repairing dents in automotive bumpers, comprised of:
a support frame (52, 54) ;
a mounting mechanism (third sentence, paragraph 18) for mounting said support frame in a vehicle;
a mounting table (42) having a resilient mounting surface affixed to said support frame for supporting a bumper;
an adjustable positioning mechanism (44, 86) for positioning a bumper in the appropriate position on said mounting table;
a top rail (50) mounted on said support frame;
a press (60) suspended from said support frame on said top rail;
a tool head (70) attachable to said press for holding at least one tool for pressing dents out of a bumper; whereby a bumper may be positioned on said mounting table below said press so said tool head presses a deformation smooth on a bumper.

20. The system of claim 19 wherein said system includes:
a pivotable mechanism (paragraph 20) for supporting said top rail for pivoting movement relative to said support frame.

21. The system of claim 19 wherein said adjustable positioning mechanism includes:
a plurality of holes (44) formed in said mounting table; and
at least one pin (paragraph 28) insertable in said plurality of holes for controlling the
position of a bumper on said mounting table.

22. (New) The system of claim 1 wherein said system further includes:
a mounting mechanism for mounting said press on said top rail and allowing said press to
adjustably move relative to said top rail.

24. (New) The system of claim 19 wherein said system includes:
a plurality of said tool heads; and
each of said tool heads having a differing configuration to press deformations in a
bumper depending on the size, location and style of bumper.

25. (New) The system of claim 19 wherein said adjustable position mechanism
includes:
at least one leveling block (82, 84) to support a bumper in a correct position.

In regard to the statement that the “speculative” disclosure on page 7 is not a clear enabling disclosure of a pneumatic supply to allow one of ordinary skill in the art to make and/or use the invention, the Applicant strongly disagrees. One skilled in this particular art of press systems would clearly and unequivocally be aware of the use of pneumatic power units in place of hydraulic power units. The examiner is directed to any one of numerous treatises on power supply units, such as Hydraulic and Pneumatic Power for Production, Fourth Edition Harry L. Stewart, Published: January, 1977, ISBN (0-8311-)1114-3. The examiner is also directed to the Horn et al. reference cited by the examiner, column 3, line 52 which discloses using either hydraulics or pneumatics to power the press disclosed therein. The examiner is directed to MPEP 2164.01 that states in part:

“The test of enablement is whether one reasonably skilled in the art could make or use the invention from the disclosures in the patent coupled with information

known in the art without undue experimentation."). *A patent need not teach, and preferably omits, what is well known in the art.* *In re Buchner*, 929 F.2d 660, 661, 18 USPQ2d 1331, 1332 (Fed. Cir. 1991); *Hybritech, Inc. v. Monoclonal Antibodies, Inc.*, 802 F.2d 1367, 1384, 231 USPQ 81, 94 (Fed. Cir. 1986), *cert. denied*, 480 U.S. 947 (1987); and *Lindemann Maschinenfabrik GMBH v. American Hoist & Derrick Co.*, 730 F.2d 1452, 1463, 221 USPQ 481, 489 (Fed. Cir. 1984). (emphasis added by attorney)

The examiner is also directed to MPEP 2164.04 that states in part:

“In order to make a rejection, the examiner has the initial burden to establish a reasonable basis to question the enablement provided for the claimed invention. *In re Wright*, 999 F.2d 1557, 1562, 27 USPQ2d 1510, 1513 (Fed. Cir. 1993) (*examiner must provide a reasonable explanation as to why the scope of protection provided by a claim is not adequately enabled by the disclosure*).”

The examiner is requested to provide the reasonable basis on which the enablement of the limitations in claims 4 and 16 are questioned beyond the mere conclusionary statement provided in the Office Action. The Applicant contends that any competent mechanical engineer or artisans with experience in designing equipment utilizing presses would be well aware of the use of either hydraulic or pneumatic supply units to power a press.

Similarly, any competent mechanical engineer or equipment designer would be able to create a top rail that is pivotally mounted to a support frame through the use of “bearings, bushings or other mechanisms allowing pivotable rotation of the rail 50 relative to the support post.” as described in paragraph 20 without undue experimentation. The examiner is requested to provide the reasonable basis for which the enablement of the specification and claims are questioned.

Rejection of the claims under 35 USC 112, second paragraph

This rejection has been rendered moot due to the amendment to the claims and as discussed above. All claim elements have correct antecedent basis as well as support in the specification.

Rejection of the claims under 35 USC §103

Claims 1, 2, 6 – 12 and 14 – 15, and 17 were rejected under 35 USC 103(a) as unpatentable over Weiner in view of Shaw. Weiner discloses a bumper repair apparatus using hard concave dies dedicated to particular shape of bumpers along with forming members also dedicated to a particular shape of bumper. The forming members are not attached to the press but are allowed to slip or move while in use. Shaw is cited as disclosing an axle repair system that has a hydraulic press that is able to move relative to the top support.

The present invention as set forth in claim 1 includes the limitations of a resilient (plastic, rubber or other resilient material as described in paragraph 28) mounting table with an adjustable positioning mechanism (holes 44 and pins; leveling blocks 86 and/or clamps) for ensuring that the deformed bumper is in the correct position. This allows any number of shapes of bumpers to be repaired rather than having to stock a die for every shape of bumper. Also, numerous dies for each individual bumper is required by Weiner depending on the location of the dent in the bumper. The invention of claim 1 is able to repair virtually any shape of bumper along any location on the bumper with the use of the flexible mounting table, the positioning system which positions the bumper in the correct position. Additionally, claim 1 requires a tool head affixed to the press. The forming member of Weiner tends to slip out during use which can damage not only the bumper and the system but the operator as well.

Neither Weiner or Shaw disclose or suggest in any manner a resilient mounting table, an adjustable workpiece positioning mechanism or a tool head affixed to the press. It is a tenet of patent law that under 35 U.S.C. 103, the references must suggest the need for a limitation in order to modify a reference to achieve that limitation. As stated by the Federal Circuit in *In re Fritch*, 23 USPQ 2d 1780, 1783-1784 (Fed. Cir. 1992), “The mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification.”

Here, there is no suggestion of the desirability of modifying Weiner to add the missing limitations. Thus claim 1 is allowable over the cited prior art.

Claims 2 – 18 all include these limitations and are considered allowable for that reason. Further, claim 8 includes the limitation of a mounting mechanism for mounting the system in the bed of a vehicle. Neither Weiner or Shaw disclose a mobile system or any system that includes a mechanism for mounting in a vehicle for mobile use. This is an important limitation as most

bumper repairs occur onsite at dealership locations or auto body locations. Shaw was cited as disclosing this feature, but there is no such disclosure found in the Shaw reference. Thus, claim 8 is further allowable for this reason.

Further claim 10 includes the limitation of a leveling element for stabilizing the system. Neither Weiner or Shaw disclose this limitation. This is an important feature since these presses are capable of considerable force. Thus claim 10 is further allowable for this reason.

Claims 3 and 5 were rejected under 35 USC 103(a) as being unpatentable over Weiner in view of Shaw in view of Horn et al. Horn et al is cited as disclosing a pneumatic cylinder. Horn et al is also cited as disclosing holes 20 for adjustably positioning the bumper. However, the holes 20 are used to secure drum 17 from rotating. It does not hold the bumper itself. Horn et al. does not disclose a resilient mounting table, an adjustable work piece positioning mechanism or a tool head affixed to the press. Thus claims 3 and 5 are allowable for the reasons cited above.

New claims 19 - 25 include the limitations of the claims 1 - 17 with claim 19 having the limitation of claim 8 directly incorporated in the independent claim.

The Applicant respectfully requests that claims 1 - 25 be allowed in view of the above remarks. The Examiner is respectfully requested to telephone the undersigned if further discussions would advance the prosecution of this application.

Respectfully submitted,

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